

“Spacing from Minor Sources” - It is important to understand the monitoring objective for a particular location in order to interpret this particular requirement. Local minor sources of a primary pollutant, such as SO₂, lead, or particles, can cause high concentrations of that particular pollutant at a monitoring site. If the objective for that monitoring site is to investigate these local primary pollutant emissions, then the site is likely to be properly located nearby. This type of monitoring site would in all likelihood be a microscale type of monitoring site. If a monitoring site is to be used to determine air quality over a much larger area, such as a neighborhood or city, a monitoring agency should avoid placing a monitor probe, path, or inlet near local, minor sources. The plume from the local minor sources should not be allowed to inappropriately impact the air quality data collected at a site. Particulate matter sites should not be located in an unpaved area unless there is vegetative ground cover year round, so that the impact of windblown dusts will be kept to a minimum.

- 1) KDHE believes the KNZ184 CASTNET monitor is not properly sited to collect ozone data for regulatory purposes given the research fires conducted at that site and their propensity to generate localized emissions, and the initial purpose of the monitor as a research site (ecosystem assessment) conflicts with its use as a compliance monitor.
- 2) Lack of communication with KDHE during the transition of the monitor to a compliance monitor. KDHE did not find out that the monitor had been upgraded for conversion to a compliance monitor until 2012.
- 3) State agencies have the responsibility, according to the Exceptional Events Rule, to demonstrate to their EPA region that an exceptional event occurred and should be flagged. Given the frequency of research burns and proximately to localized prescribed burning, it would be a time consuming and a costly endeavor for KDHE's staff of 3 personnel to develop Exceptional Event demonstration packages for each potential episode.
- 4) The Monitor is located in Riley County, which is primarily rural and agriculturally based. There is little to no industry for reduction of emissions to apply RACT.
- 5) If future monitoring needs result in use of the CASTNET sites for the PM NAAQS, this site could potentially be elevated as contributing to “Ag Dust”.

Options that have been discussed between Region 7, OAQPS, CAMD and KDHE

- 1) Classify the ozone monitor as a “Special Purpose Monitor (SPM)” to allow continued ozone data collection for research purposes while excluding such data from compliance/regulatory decision making due to localized area/minor source impacts and the ability of the monitor to meet 40 CFR Part 58 monitor siting criteria.

Most SPM are located at temporary sites, less than 2 years.

- 2) Exclude data from regulatory decision making during certain time periods of localized controlled burns, specifically, during the ozone season. Research oriented burns are conducted in close proximity to the CASTNET monitor on the same research lands that host the monitor. According to 40 CFR Part 58, such activities impact the ability of the monitor to meet the siting criteria and call into question the validity of the data.

CAMD would need to review the regulatory implications of changing the QA for the Konza site.

Additional Information

Recent ozone exceedances at Konza Prairie CASNET site KNZ184:
April 12, 2011 0.078 ppm and April 13, 2011 0.079 ppm

Mark Evangelista evaluated the burn data from the Kansas State University website and didn't see significant differences compared to transport of emissions recorded at surrounding KS monitors.

KDHE feels strongly that there are three options:

- 1) The monitor stays and Riley County will be designated non-attainment
- 2) The monitor stays, but utilized as a SPM
- 3) The State lobbies The Nature Conservancy/KSU for the removal of the monitor.